

Title (en)

MAMMALIAN MILK GROWTH FACTOR

Title (de)

SÄUGETIER MILCHWACHSTUMSFAKTOR

Title (fr)

FACTEUR DE CROISSANCE DU LAIT DE MAMMIFERE

Publication

**EP 1030867 A4 20021204 (EN)**

Application

**EP 98958726 A 19981112**

Priority

- AU 9800942 W 19981112
- AU PP031897 A 19971112

Abstract (en)

[origin: WO9924470A1] A mammalian milk growth factor (MMGF) having the following amino acid sequence or substantially homologous sequence: DGNSTRSPEDDGLCGDHAENCATTQPKRRGHFSRCPKQYKHYCIKGRCRFVVAEQTPSCVCDEGYAGARCERVDLFY or a mutant, analogue, derivative or functionally active fragment thereof.

IPC 1-7

**C07K 14/475; C07K 14/485; C07H 21/04; A61K 38/18; C12N 5/06; C12N 5/08; C12N 15/10; C12N 15/63; C12N 15/66**

IPC 8 full level

**C12N 15/09** (2006.01); **A61K 8/00** (2006.01); **A61K 8/64** (2006.01); **A61K 8/72** (2006.01); **A61K 8/96** (2006.01); **A61K 38/22** (2006.01); **A61P 1/02** (2006.01); **A61P 1/04** (2006.01); **A61P 17/02** (2006.01); **A61Q 11/00** (2006.01); **C07H 21/04** (2006.01); **C07K 1/16** (2006.01); **C07K 14/47** (2006.01); **C07K 14/475** (2006.01); **C07K 14/485** (2006.01); **C07K 19/00** (2006.01); **A61K 38/00** (2006.01)

CPC (source: EP US)

**A61P 1/00** (2017.12 - EP); **A61P 1/02** (2017.12 - EP); **A61P 1/04** (2017.12 - EP); **A61P 17/02** (2017.12 - EP); **C07K 14/475** (2013.01 - EP US); **A61K 38/00** (2013.01 - EP US); **C07K 2319/00** (2013.01 - EP US)

Citation (search report)

- [X] EP 0555785 A1 19930818 - TAKEDA CHEMICAL INDUSTRIES LTD [JP], et al
- [Y] WATANABE T ET AL: "RECOMBINANT HUMAN BETACELLULIN", JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US, vol. 269, no. 13, 1 April 1994 (1994-04-01), pages 9966 - 9973, XP002006318, ISSN: 0021-9258
- [Y] FRANCIS G L ET AL: "EXTRACTION FROM CHEESE WHEY BY CATION-EXCHANGE CHROMATOGRAPHY OF FACTORS THAT STIMULATE THE GROWTH OF MAMMALIAN CELLS", JOURNAL OF DAIRY SCIENCE, AMERICAN DAIRY SCIENCE ASSOCIATION, CHAMPAIGN, ILLINOIS, US, vol. 78, no. 6, June 1995 (1995-06-01), pages 1209 - 1218, XP001053707, ISSN: 0022-0302
- [Y] BELFORD D A ET AL: "MILK-DERIVED GROWTH FACTORS AS SERUM SUPPLEMENTS FOR THE GROWTH OF FIBROBLAST AND EPITHELIAL CELLS", IN VITRO CELLULAR & DEVELOPMENTAL BIOLOGY. ANIMAL, TISSUE CULTURE ASSOCIATION, COLUMBIA, MD, US, vol. 31, no. 10, November 1995 (1995-11-01), pages 752 - 760, XP000913405, ISSN: 1071-2690
- [Y] BELFORD D A ET AL: "PLATELET-DERIVED GROWTH FACTOR, INSULIN-LIKE GROWTH FACTORS, FIBROBLAST GROWTH FACTORS AND TRANSFORMING GROWTH FACTOR SS DO NOT ACCOUNT FOR THE CELL GROWTH ACTIVITY PRESENT IN BOVINE MILK", JOURNAL OF ENDOCRINOLOGY, BRISTOL, GB, vol. 154, no. 1, 1997, pages 45 - 55, XP000913489, ISSN: 0022-0795
- [PX] MURPHY M S: "GROWTH FACTORS AND THE GASTROINTESTINAL TRACT", NUTRITION, NUTRITION, BURBANK, CA, US, vol. 14, no. 10, 1998, pages 771 - 774, XP000929411, ISSN: 0899-9007
- [T] DUNBAR ANDREW J ET AL: "Identification of betacellulin as a major peptide growth factor in milk: Purification, characterization and molecular cloning of bovine betacellulin.", BIOCHEMICAL JOURNAL, vol. 344, no. 3, 15 December 1999 (1999-12-15), pages 713 - 721, XP002215775, ISSN: 0264-6021
- See references of WO 9924470A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**WO 9924470 A1 19990520; WO 9924470 A8 20000518;** AT E487735 T1 20101115; AU PP031897 A0 19971204; CA 2309317 A1 19990520; DE 69841995 D1 20101223; DK 1030867 T3 20110214; EP 1030867 A1 20000830; EP 1030867 A4 20021204; EP 1030867 B1 20101110; JP 2002508151 A 20020319; JP 2010099088 A 20100506; NZ 503999 A 20011026; US 2003152526 A1 20030814; US 6531134 B1 20030311

DOCDB simple family (application)

**AU 9800942 W 19981112;** AT 98958726 T 19981112; AU PP031897 A 19971112; CA 2309317 A 19981112; DE 69841995 T 19981112; DK 98958726 T 19981112; EP 98958726 A 19981112; JP 2000520478 A 19981112; JP 2010013455 A 20100125; NZ 50399998 A 19981112; US 33799303 A 20030108; US 55411900 A 20000510